

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 December 2004 (16.12.2004)

PCT

(10) International Publication Number
WO 2004/108648 A1

- (51) International Patent Classification⁷: C07C 51/00 [KR/KR]; Songgang Green Apt. 317-1305, Songgang-dong 199, Yuseong-gu, Daejeon 305-751 (KR).
- (21) International Application Number: PCT/KR2004/001350 (74) Agent: CHO, In-Jae; 3rd Fl., Janghyun Bldg., 637-23, Yeoksam-dong, Gangnam-gu, Seoul 135-909 (KR).
- (22) International Filing Date: 4 June 2004 (04.06.2004) (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (25) Filing Language: Korean
- (26) Publication Language: English
- (30) Priority Data: 10-2003-0036352 5 June 2003 (05.06.2003) KR
- (71) Applicant (for all designated States except US): LG CHEM. LTD. [KR/KR]; LG Twin Tower, East Tower 20, Yeouido-dong, Yeongdeungpo-gu, Seoul 150-721 (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LEE, Sang-gi [KR/KR]; Samsung Pureun Apt. 105-1203, Jeonmin-dong, Yuseong-gu, Daejeon 305-727 (KR). MOON, Ji-joong [KR/KR]; LG Apt., 8-409, Doryong-dong 381-42, Yuseong-gu, Daejeon 305-340 (KR). REW, Dae-sun [KR/KR]; Sejong Apt. 111-1003, Jeonmin-dong, Yuseong-gu, Daejeon 305-728 (KR). KO, Dong-hyun [KR/KR]; Gyosu Apt. 11-301, Gajeong-dong, Yuseong-gu, Daejeon 305-350 (KR). EOM, Sung-shik
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR PREPARING ORGANIC ACID

(57) Abstract: Provided is a method for producing an organic acid, which includes: mixing a compound containing one or two aldehyde groups and a solvent to obtain a reaction mixture; and maintaining the reaction mixture in a liquid phase in the presence of pure oxygen or O₂-enriched air containing 25-90 % oxygen at a temperature of a 0-70 °C, under a pressure condition of an atmospheric pressure to 10kg/cm², and for 2-10 hours. The method can enhance the selectivity of the organic acid, thereby increasing the yield of the organic acid.

WO 2004/108648 A1